DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1x.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-014310
Date Inspected: 20-May-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 1000
OSM Departure Time: 1830
Location: Job Site

CWI Name: William Sherwood and Jesse Cayabyab **CWI Present:** ☑ Yes ☐ No

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girder

Summary of Items Observed:

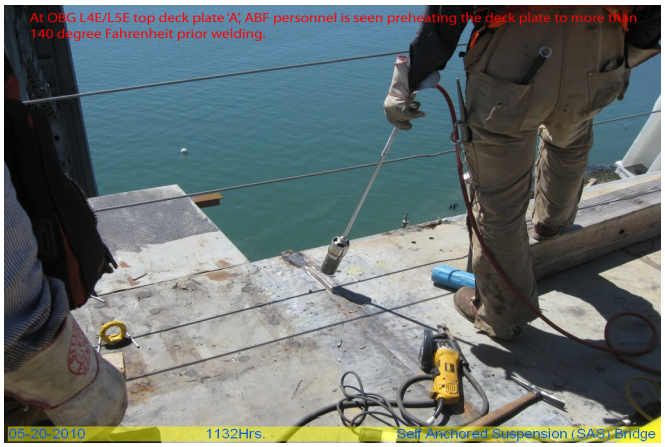
Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG L4E/L5E top deck plate ‘A’ outside, QA randomly observed ABF/JV qualified welder Rick Clayborn ID # 2773 perform CJP groove welding repair. The welder was observed welding in the 1G (flat) position utilizing Shielded metal Arc Welding (SMAW) with 5/32” diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. The repair excavations were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC Tom Pasqualone was noted monitoring the welder. Prior welding, ABF QC Tom Pasqualone was also observed performing Magnetic Particle Testing (MT) using Parker Contour Probe with red magnetic powder as detecting media on the repair excavation. During the shift, the welder has completed six welding repairs and that should complete all the welding repairs in this plate.

At OBG L4E/L5E top deck plate ‘A’ outside, this QA performed a 10% Magnetic Particle Testing (MT) using a Parker Contour Probe electromagnetic yoke with corresponding red magnetic powder as detecting media to the welded splice butt joint. The surface profiles of the joints were as welded and cleaned with wire brush. There were no significant defects noted during the test.

At OBG L1W/L2W plate ‘D’ inside, ABF Chun Fai Tsui ID # 3426 was noted welding manually at the splice butt joint of the longitudinal stiffener S2, S3 and S4 (320mm long X 35mm thickness). QA randomly observed the welder perform Complete Joint Penetration (CJP) welding cover pass. The welder was noted welding in the

vertical (3G) position utilizing an semi-automatic dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16” diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3110-3. The joint being welded has a double V-groove butt joint and was battered (with temporary backing bar in place) due to excessive gap. The backing bar has been removed and the surfaced was ground smooth prior welding. The splice joint was preheated and maintained to greater than 200 degree Fahrenheit using propane gas torch prior welding. During welding, ABF Quality Control (QC) Bonifacio Daquinag was noted monitoring the welder and parameters of the welder. QA performed parameter readings during welding with the following results; 200 amperes, 22.2 volts. Welding parameters noted are deemed acceptable to contract specifications. While Welder Chun Fai Tsui on the cover of the stiffener splice butt joints, welder James Zhen was also flush grinding the weld cover of the splice butt joint.



Summary of Conversations:

As stated above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Mohammad Fatemi (916) 227-5298, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer